

AMENDMENTS TO THE CLAIMS

This listing replaces all prior versions and listings of claims in the application.

Listing of Claims

1. **(previously presented)** A kit for the detection and measurement of a positively charged transition element in a sample, where the measured transition element is a tag on a biologically active material that binds with at least one of an analyte and analyte complex, comprising:
 - (a) at least one tag, wherein the at least one tag comprises at least one isotope of a transition element and a linker moiety, wherein the tag is capable of directly tagging a biologically active material;
 - (b) instructions; and
 - (c) packaging means.
2. **(previously presented)** The kit of claim 1 further comprising a biologically active material, wherein the biologically active material is directly tagged with at least one isotope of a tag comprising a transition element.
3. **(previously presented)** A kit for the detection and measurement of a positively charged transition element in a sample, where the measured transition element is a tag on a competition analyte, comprising:
 - (a) a tag comprising at least one isotope of a transition element and a linker moiety, wherein the tag is capable of directly tagging a competition analyte;
 - (b) instructions; and
 - (c) packaging means.
4. **(previously presented)** The kit of claim 3 further comprising a competition analyte, wherein the competition analyte is directly tagged with a tag comprising at least one isotope of a transition element.
5. **(previously presented)** The kit of claim 1 further comprising capture molecules that bind the analyte, analyte complex or competition analyte.
6. **(previously presented)** The kit of claim 1 further comprising solid support means, wherein the solid support means comprises binding sites for one of the analyte and a capture molecule.

7. **(original)** The kit of claims 6 wherein the solid support means is selected from the group consisting of microwell plates and beads.
8. **(original)** The kit of claim 7 wherein the beads are selected from the group consisting of sepharose beads, agarose beads, polystyrene beads and polymeric microspheres.
9. **(original)** The kit of claim 6 wherein the capture molecules are selected from the group consisting of antibodies and aptamers.
10. **(previously presented)** The kit of claim 1 further comprising standards.
11. **(previously presented)** The kit of claim 1 further comprising a dilution buffer.
12. **(previously presented)** The kit of claim 1 further comprising an elution buffer.
13. **(previously presented)** The kit of claim 1 further comprising a wash buffer.
14. **(previously presented)** The kit of claim 1 further comprising an assay buffer.
- 15-19. **(canceled)**
20. **(previously presented)** The kit of claim 1 wherein the isotope is selected from a group consisting of the noble metals, lanthanides, rare earth elements, gold, silver, platinum, rhodium, iridium and palladium.
21. **(original)** The kit of claim 3 wherein the biologically active material is selected from a group consisting of an antibody, Fab', aptamer, antigen, hormone, growth factor, receptor, protein and nucleic acid.
22. **(previously presented)** The kit of claim 1 wherein the tag includes more than one element.
23. **(previously presented)** The kit of claim 1 wherein the tag includes more than one isotope.
24. **(previously presented)** The kit of claim 1 wherein the tag includes more than one atom of an isotope.
25. **(previously presented)** The kit of claim 23 wherein the tag includes a different number of atoms of each isotope.
26. **(previously presented)** The kit of claim 1 comprising two or more tags for simultaneous determination of two or more analytes.
27. **(previously presented)** The kit of claim 2 comprising two or more tags for simultaneous determination of two or more analytes.

28. **(canceled)**

29. **(previously presented)** A kit for the detection and measurement of an element in a sample, where the measured element is a tag on an analyte in a sample, comprising:

- a) a tag comprising at least one isotope of a positively charged transition element and a linker moiety, for directly tagging the analyte with a transition element;
- b) reagents for tagging the analyte with the tag; and
- c) reagents for running a sample containing the tagged analyte on an electrophoreses gel
- d) instructions; and
- e) packaging means.

30-36. **(canceled)**